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APPLICATION NO.	I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,305		02/13/2002	Karen Papierniak	9686 (3225-133)	4450
26890	7590	06/15/2005		EXAM	INER
JAMES M				NGUYEN BA,	HOANG VU A
NCR CORPORATION 1700 SOUTH PATTERSON BLVD, WHO4			ART UNIT	PAPER NUMBER	
DAYTON, OH 45479		•	2192	•	
				DATE MAILED: 06/15/200:	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
•	10/073,305	PAPIERNIAK ET AL.
Office Action Summary	Examiner	Art Unit
	Hoang-Vu A. Nguyen-Ba	2192
The MAILING DATE of this communicati Period for Reply	on appears on the cover sheet w	ith the correspondence addres
A SHORTENED STATUTORY PERIOD FOR ITHE MAILING DATE OF THIS COMMUNICAT  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communica  - If the period for reply specified above, the maximum statutory  - Failure to reply within the set or extended period for reply will, b  Any reply received by the Office later than three months after the	TION.  CFR 1.136(a). In no event, however, may a rition.  s, a reply within the statutory minimum of thir period will apply and will expire SIX (6) MON y statute, cause the application to become AE	eply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this commu BANDONED (35 U.S.C. § 133).
earned patent term adjustment. See 37 CFR 1.704(b).  Status		
1)⊠ Responsive to communication(s) filed or	n <u>04 March 2005</u> .	
<del>_</del>	This action is non-final.	
3) Since this application is in condition for a	allowance except for formal matt	ers, prosecution as to the me
closed in accordance with the practice u	nder <i>Ex parte Quayle</i> , 1935 C.D	). 11, 453 O.G. 213.
Disposition of Claims		
4)⊠ Claim(s) <u>1-21</u> is/are pending in the applie	cation.	
4a) Of the above claim(s) is/are w	thdrawn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-21</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction	and/or election requirement.	
Application Papers		
9) The specification is objected to by the Ex	aminer.	
10) The drawing(s) filed on is/are: a)	<u> </u>	by the Examiner.
Applicant may not request that any objection	· · · · ·	- <del>-</del>
		• •

12) Ackno	wledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)∐ All	b)☐ Some * c)☐ None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attac	hme	nt	(s)
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1) 🛛	Notice of References Cited (PTO-892)
2) 🔲	Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) 🔲	Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08
	Paper No(s)/Mail Date

4) 🔲	Interview Summary (PTO-413
	Paner No(s)/Mail Date

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_.

#### **DETAILED ACTION**

1. This action is responsive to the amendment filed March 04, 2005.

# Response to Amendments

- 2. Per Applicants' request, Claims 1-7, 11, 13, 16-18 and 20-21 have been amended. Claims 1-21 remain pending.
- 3. The objection to the declaration is withdrawn in view of Applicants' filing of a compliant substitute declaration.
- 4. The examiner acknowledges receipt of the corrected drawings filed concurrently with the above-mentioned amendment. The objection to the drawings because of the identified minor informalities is withdrawn, however Applicants are advised to file the drawing sheets with the label "Replacement Sheet" in the top margin according to the following guidelines:

# INFORMATION ON HOW TO EFFECT DRAWING CHANGES Replacement Drawing Sheets

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number

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has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

# **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

# **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

The requirement for properly labeled drawings will not be held in abeyance.

- 5. The objection to the specification is withdrawn in view of Applicants' amendments to the title of the invention to make it more descriptive and to accompany the identified trademarks with appropriate symbol.
- 6. The rejection of Claims 6 and 21 under 35 U.S.C. § 112, first paragraph is withdrawn in view of Applicants' showing of proper support from the specification for the identified limitation in the Claims.
- 7. The rejection of Claims 13-21 under 35 U.S.C. § 101 is withdrawn in view of Applicants' amendments to these Claims to direct these Claims to statutory subject matter.

# Response to Arguments

8. Applicant's arguments with respect to Claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

# Claim Rejections - 35 U.S.C. § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 10. Claims 1 and 13 are rejected under 35 U.S.C. § 102(a) as being anticipated by NLREG.com ("NLREG"), Nonlinear Regression and Curve Fitting, published in January 18, 2002. Note that "Nonlinear Regression and Curve Fitting," "Introduction to Regression Analysis," "NLREG Screen Shots," etc. are part of only **one** document entitled NLREG obtained from

http://web.archive.org/web/20020118073646/http://nlreg.com/.

#### Claim 1

NLREG discloses at least:

selecting a data set (see at least section Data Statement, pp. 12-13); applying a best-fit rule to the data set (see at least NLREG, p.1/4, second paragraph, e.g., "... to best fit a set of data values..."; p. 2/4, ); NLREG, p. 2/4, 4<sup>th</sup> paragraph, e.g., "... to best fit the function to the data..."; NLREG, p. 2/4, information related to 9<sup>th</sup> and 11<sup>th</sup> paragraphs);

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generating at least one best-fit graph based on the data set and best-fit rule applied (see at least NLREG, p. 2/4, 4<sup>th</sup> paragraph, e.g., "... can generate plots of the data points and the fitted equation..." and related information in the reference).

#### Claim 13

NLREG discloses at least:

a graph generator selectively applying at least one rule and graph type to the data set to generate at least one graph (see at least NLREG, pp. 1-2, e.g., the NLREG program itself is a graph generator).

NLREG does not specifically disclose a database storing a data set, at least one rule, and at least one graph type. However, this feature is deemed inherent to NLREG or any curve fitting programs because at least at p. 12/13 of the NLREG Programming Language, section Data Statement, 1<sup>st</sup> paragraph, it is shown that the name of the file containing the data records should be specified in order for the program to best fit specified rule or equation to the data contained in this file. A database storing files containing data sets has to be available in order for the program to know where to go to retrieve the required data.

# Claim Rejections – 35 USC § 103

- 11. The following is a quotation of the 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 2-12 and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over NLREG as applied to Claims 1 and 13, in view of U.S. Patent No. 6,477,538 to Yaginuma et al. ("Yaginuma").

#### Claims 2 and 20

NLREG does not specifically disclose selectively publishing at least one of the best-fit graphs generated. However, Yaginuma teaches this limitation in 16:35-45 for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine NLREG with Yaginuma for the purpose discussed above.

#### Claims 7 and 21

NLREG does not specifically disclose wherein the publishing step includes publishing a graph by storing the best-fit graph to a storage device. However, Yaginuma teaches this limitation in Figures 1, 18, 19 and related discussion in the specification for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine NLREG with Yaginuma for the purpose discussed above.

#### Claims 3 and 18

NLREG does not specifically disclose the step of customizing a best-fit rule. However, Yaginuma teaches this limitation in 15:13-38; Figures 14, 34-36 and related discussion in the specification for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious

to a person having ordinary skill in the art at the time the invention was made to combine NLREG with Yaginuma for the purpose discussed above.

### Claims 4 and 19

NLREG does not specifically disclose wherein the best-fit graph generated by the generating step is based on the graph type. However, Yaginuma teaches this limitation in Figure 4, step S21 and related discussion in the specification for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine NLREG with Yaginuma for the purpose discussed above.

#### Claims 12 and 15

Since claims 12 and 15 recite limitations in a form of alternative expression and explicitly claim at least one of the recited limitations, the Office considers only the limitation *tree graph* for art rejection purposes.

NLREG does not specifically disclose wherein the graph type includes at least a tree graph. However, the tree graph type is considered taught by Yaginuma (see at least Figure 39 and related discussion in the specification) for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine NLREG with Yaginuma for the purpose discussed above.

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#### Claim 8

NLREG does not specifically disclose wherein the generating step occurs as a result of a trigger event. However, Yaginuma teaches this limitation in at least Figure 30 and related discussion in the specification for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine NLREG with Yaginuma for the purpose discussed above.

#### Claim 9

NLREG does not specifically disclose wherein the generating step occurs as a result of a threshold being met or exceeded. However, Yaginuma teaches this limitation in at least 18:39-56 for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine NLREG with Yaginuma for the purpose discussed above.

#### Claims 10 and 14

Since claims 10 and 14 recite limitations in a form of alternative expression and explicitly claim at least one of the recited limitations, the Office considers only the limitation *summary tables* for art rejection purposes.

NLREG does not specifically disclose wherein the data set includes at least summary tables. However, the limitation summary table is considered taught by Yaginuma (see at least Figure 39 and related discussion in the specification for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to combine NLREG with Yaginuma for the purpose discussed above.

#### Claim 11

Since claim 11 recites limitations in a form of alternative expression and explicitly claims at least one of the recited limitations, the Office considers only the limitation *data sparsity* for art rejection purposes.

NLREG does not specifically disclose wherein the best-fit rule includes at least data sparsity. However, the limitation data sparsity is considered taught by Yaginuma (see at least Figure 39, e.g., "dispersion value" and related discussion in the specification) for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine NLREG with Yaginuma for the purpose discussed above.

#### Claim 16

NLREG does not specifically disclose wherein the database further stores at least one trigger. However, Yaginuma teaches this limitation in at least Figure 4, steps S11, S12 and related discussion in the specification for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine NLREG with Yaginuma for the purpose discussed above.

### Claim 17

NLREG does not specifically disclose wherein the database further stores at least one threshold value and wherein the graph generator selectively applies at least one best-fit rule and graph

type to the data set to generate at least one best-fit graph as a result of a threshold value being met or exceeded. However, Yaginuma teaches this limitation in at least Figure 39 and related discussion in the specification for the purpose of allowing a user to obtain results by various kinds of analysis in a common graph (2:42-43). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine NLREG with Yaginuma for the purpose discussed above.

#### Claims 5 and 21

NLREG does not specifically disclose wherein the publishing step includes publishing a best-fit graph to a web site. However, official notice is taken that publishing a graph or an image to a web site is well known in the art (see Lemay's Teach yourself Web Publishing with HTML 3.0 in a week, Chapter 9, 2<sup>nd</sup> Edition, 1996, SAMS.net). The basic requirement is that the graph filename is to be saved with the .gif extension. In order to publish the graph to web page, the following tag can be used: <IMG SRC = ".../image.gif">.../image.gif</a>. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the above HTML tag to publish graphs in NLREG to a web site so that the graph can be viewed on the WWW.

#### Claims 6 and 21

NLREG does not specifically disclose wherein the publishing step includes publishing a best-fit graph by transmitting the graph in connection with email. However, official notice is taken that it is well known in that art to attach a graph or image file to an e-mail message so that this graph or image file can be transmitted to an e-mail recipient. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use attach graph files in NLREG to an e-mail message so that the graph file can be sent to an e-mail recipient.

#### Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hoang-Vu A. Nguyen-Ba whose telephone number is (571) 272-3701. The Examiner can normally be reached on Tuesday-Friday, 7:15 – 17:45.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Tuan Dam can be reached at (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Horizonartony)zujerisa

ANTONY NGUYEN-BA PRIMARY EXAMINER

Art Unit 2192

June 10, 2005